

RECEIVED/600  
SEP 16 2003

TECH CENTER

**CRF Errors Edited by the STIC Systems  
Branch**

Serial Number: 08/887,505A

CRF Edit Date: 9/15/2003  
Edited by: arc

**ENTERED**

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

J \_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

98

\_\_\_ Deleted: \_\_\_ invalid beginning/end-of-file text ; \_\_\_ page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

\_\_\_ Other:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RECEIVED

SEP 16 2003

TECH CE



1600

## RAW SEQUENCE LISTING

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:53

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

## SEQUENCE LISTING

4 (1) GENERAL INFORMATION:  
6 (i) APPLICANT: Kilkuskie, Robert E.  
7 Frank, Bruce L.  
8 Goodchild, John  
9 Wolfe, Jia L.  
10 Roberts, Peter C.  
11 Hamlin, Jr., Henry A.  
12 Roberts, Noel A.  
13 Walther, Debra M.  
15 (ii) TITLE OF INVENTION: Oligonucleotides Specific for  
16 Hepatitis C Virus  
18 (iii) NUMBER OF SEQUENCES: 173  
20 (iv) CORRESPONDENCE ADDRESS:  
21 (A) ADDRESSEE: Hale and Dorr LLP  
22 (B) STREET: 60 State Street  
23 (C) CITY: Boston  
24 (D) STATE: MA  
25 (E) COUNTRY: USA  
26 (F) ZIP: 02109  
28 (v) COMPUTER READABLE FORM:  
29 (A) MEDIUM TYPE: Floppy disk  
30 (B) COMPUTER: IBM PC compatible  
31 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
32 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30  
34 (vi) CURRENT APPLICATION DATA:  
C--> 35 (A) APPLICATION NUMBER: US/08/887,505A  
C--> 36 (B) FILING DATE: 02-Jul-1997  
37 (C) CLASSIFICATION:  
39 (vii) PRIOR APPLICATION DATA:  
40 (A) APPLICATION NUMBER: US 08/471,968  
41 (B) FILING DATE: 06-JUN-1995  
43 (viii) ATTORNEY/AGENT INFORMATION:  
44 (A) NAME: Kerner, Ann-Louise  
45 (B) REGISTRATION NUMBER: 33,523  
46 (C) REFERENCE/DOCKET NUMBER: 47508-250HYZ-040CIP  
48 (ix) TELECOMMUNICATION INFORMATION:  
49 (A) TELEPHONE: (617) 526-6000  
50 (B) TELEFAX: (617) 526-5000  
54 (2) INFORMATION FOR SEQ ID NO: 1:  
56 (i) SEQUENCE CHARACTERISTICS:  
57 (A) LENGTH: 20 base pairs  
58 (B) TYPE: nucleic acid

## RAW SEQUENCE LISTING

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:53

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

```

59             (C) STRANDEDNESS: single
60             (D) TOPOLOGY: linear
W--> 62      (ii) MOLECULE TYPE: DNA
64      (iii) HYPOTHETICAL: NO
66      (iv) ANTI-SENSE: YES
68      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
70 GGTGCACGGT CTACGAGACC                                20
72 (2) INFORMATION FOR SEQ ID NO: 2:
74      (i) SEQUENCE CHARACTERISTICS:
75          (A) LENGTH: 20 base pairs
76          (B) TYPE: nucleic acid
77          (C) STRANDEDNESS: single
78          (D) TOPOLOGY: linear
W--> 80      (ii) MOLECULE TYPE: DNA
82      (iii) HYPOTHETICAL: NO
84      (iv) ANTI-SENSE: YES
86      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
88 CATGGTGCAC GGTCTACGAG                                20
90 (2) INFORMATION FOR SEQ ID NO: 3:
92      (i) SEQUENCE CHARACTERISTICS:
93          (A) LENGTH: 20 base pairs
94          (B) TYPE: nucleic acid
95          (C) STRANDEDNESS: single
96          (D) TOPOLOGY: linear
W--> 98      (ii) MOLECULE TYPE: DNA
100     (iii) HYPOTHETICAL: NO
102     (iv) ANTI-SENSE: YES
104     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
106 GCTCATGGTG CACGGTCTAC                                20
109 (2) INFORMATION FOR SEQ ID NO: 4:
111     (i) SEQUENCE CHARACTERISTICS:
112         (A) LENGTH: 20 base pairs
113         (B) TYPE: nucleic acid
114         (C) STRANDEDNESS: single
115         (D) TOPOLOGY: linear
W--> 117     (ii) MOLECULE TYPE: DNA
119     (iii) HYPOTHETICAL: NO
121     (iv) ANTI-SENSE: YES
123     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
125 GTGCTCATGG TGCACGGTCT                                20
127 (2) INFORMATION FOR SEQ ID NO: 5:
129     (i) SEQUENCE CHARACTERISTICS:
130         (A) LENGTH: 20 base pairs
131         (B) TYPE: nucleic acid
132         (C) STRANDEDNESS: single
133         (D) TOPOLOGY: linear
W--> 134     (ii) MOLECULE TYPE: DNA
136     (iii) HYPOTHETICAL: NO
138     (iv) ANTI-SENSE: YES

```

## RAW SEQUENCE LISTING

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:53

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

```

140      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
142 CGTGCTCATG GTGCACGGTC                                     20
144 (2) INFORMATION FOR SEQ ID NO: 6:
146      (i) SEQUENCE CHARACTERISTICS:
147          (A) LENGTH: 20 base pairs
148          (B) TYPE: nucleic acid
149          (C) STRANDEDNESS: single
150          (D) TOPOLOGY: linear
W--> 152      (ii) MOLECULE TYPE: DNA
154      (iii) HYPOTHETICAL: NO
156      (iv) ANTI-SENSE: YES
158      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
160 TCGGTGCTCA TGGTGACGG                                     20
162 (2) INFORMATION FOR SEQ ID NO: 7:
164      (i) SEQUENCE CHARACTERISTICS:
165          (A) LENGTH: 20 base pairs
166          (B) TYPE: nucleic acid
167          (C) STRANDEDNESS: single
168          (D) TOPOLOGY: linear
W--> 170      (ii) MOLECULE TYPE: DNA
172      (iii) HYPOTHETICAL: NO
174      (iv) ANTI-SENSE: YES
176      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
178 GGATTTCGTGC TCATGGTGCA                                     20
180 (2) INFORMATION FOR SEQ ID NO: 8:
182      (i) SEQUENCE CHARACTERISTICS:
183          (A) LENGTH: 20 base pairs
184          (B) TYPE: nucleic acid
185          (C) STRANDEDNESS: single
186          (D) TOPOLOGY: linear
W--> 188      (ii) MOLECULE TYPE: DNA
190      (iii) HYPOTHETICAL: NO
192      (iv) ANTI-SENSE: YES
194      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
196 TTAGGATTCG TGCTCATGGT                                     20
198 (2) INFORMATION FOR SEQ ID NO: 9:
200      (i) SEQUENCE CHARACTERISTICS:
201          (A) LENGTH: 20 base pairs
202          (B) TYPE: nucleic acid
203          (C) STRANDEDNESS: single
204          (D) TOPOLOGY: linear
W--> 206      (ii) MOLECULE TYPE: DNA
208      (iii) HYPOTHETICAL: NO
210      (iv) ANTI-SENSE: YES
212      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
214 GGGTTAGGAT TCGTGCTCAT                                     20
216 (2) INFORMATION FOR SEQ ID NO: 10:
218      (i) SEQUENCE CHARACTERISTICS:
219          (A) LENGTH: 20 base pairs

```

## RAW SEQUENCE LISTING

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:53

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

```

220          (B) TYPE: nucleic acid
221          (C) STRANDEDNESS: single
222          (D) TOPOLOGY: linear
W--> 224      (ii) MOLECULE TYPE: DNA
226      (iii) HYPOTHETICAL: NO
228      (iv) ANTI-SENSE: YES
230      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
232 TGAGGTTTAG GATTCGTGCT                                20
234 (2) INFORMATION FOR SEQ ID NO: 11:
236      (i) SEQUENCE CHARACTERISTICS:
237          (A) LENGTH: 20 base pairs
238          (B) TYPE: nucleic acid
239          (C) STRANDEDNESS: single
240          (D) TOPOLOGY: linear
W--> 242      (ii) MOLECULE TYPE: DNA
244      (iii) HYPOTHETICAL: NO
246      (iv) ANTI-SENSE: YES
248      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
250 CTTTGAGGTT TAGGATTCGT                                20
252 (2) INFORMATION FOR SEQ ID NO: 12:
254      (i) SEQUENCE CHARACTERISTICS:
255          (A) LENGTH: 20 base pairs
256          (B) TYPE: nucleic acid
257          (C) STRANDEDNESS: single
258          (D) TOPOLOGY: linear
W--> 260      (ii) MOLECULE TYPE: DNA
262      (iii) HYPOTHETICAL: NO
264      (iv) ANTI-SENSE: YES
266      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
268 TTCTTTGAGG TTAGGATTC                                20
270 (2) INFORMATION FOR SEQ ID NO: 13:
272      (i) SEQUENCE CHARACTERISTICS:
273          (A) LENGTH: 20 base pairs
274          (B) TYPE: nucleic acid
275          (C) STRANDEDNESS: single
276          (D) TOPOLOGY: linear
W--> 278      (ii) MOLECULE TYPE: DNA
280      (iii) HYPOTHETICAL: NO
282      (iv) ANTI-SENSE: YES
284      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
286 TACGTTTGGT TTTCTTTGA                                20
288 (2) INFORMATION FOR SEQ ID NO: 14:
290      (i) SEQUENCE CHARACTERISTICS:
291          (A) LENGTH: 20 base pairs
292          (B) TYPE: nucleic acid
293          (C) STRANDEDNESS: single
294          (D) TOPOLOGY: linear
W--> 296      (ii) MOLECULE TYPE: DNA
298      (iii) HYPOTHETICAL: NO

```

## RAW SEQUENCE LISTING

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:53

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

```

300      (iv) ANTI-SENSE: YES
302      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
304 GTTGGTGTTA CGTTTGGTTT                                     20
306 (2) INFORMATION FOR SEQ ID NO: 15:
308      (i) SEQUENCE CHARACTERISTICS:
309          (A) LENGTH: 20 base pairs
310          (B) TYPE: nucleic acid
311          (C) STRANDEDNESS: single
312          (D) TOPOLOGY: linear
W--> 314      (ii) MOLECULE TYPE: DNA
316      (iii) HYPOTHETICAL: NO
318      (iv) ANTI-SENSE: YES
320      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
322 GCACGACACT CATACTAACG                                     20
324 (2) INFORMATION FOR SEQ ID NO: 16:
326      (i) SEQUENCE CHARACTERISTICS:
327          (A) LENGTH: 20 base pairs
328          (B) TYPE: nucleic acid
329          (C) STRANDEDNESS: single
330          (D) TOPOLOGY: linear
W--> 332      (ii) MOLECULE TYPE: DNA
334      (iii) HYPOTHETICAL: NO
336      (iv) ANTI-SENSE: YES
338      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
340 GGCTGCACGA CACTCATACT                                     20
342 (2) INFORMATION FOR SEQ ID NO: 17:
344      (i) SEQUENCE CHARACTERISTICS:
345          (A) LENGTH: 20 base pairs
346          (B) TYPE: nucleic acid
347          (C) STRANDEDNESS: single
348          (D) TOPOLOGY: linear
W--> 350      (ii) MOLECULE TYPE: DNA
352      (iii) HYPOTHETICAL: NO
354      (iv) ANTI-SENSE: YES
356      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
358 TGGAGGCTGC ACGACACTCA                                     20
360 (2) INFORMATION FOR SEQ ID NO: 18:
362      (i) SEQUENCE CHARACTERISTICS:
363          (A) LENGTH: 20 base pairs
364          (B) TYPE: nucleic acid
365          (C) STRANDEDNESS: single
366          (D) TOPOLOGY: linear
W--> 368      (ii) MOLECULE TYPE: DNA
370      (iii) HYPOTHETICAL: NO
372      (iv) ANTI-SENSE: YES
374      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
376 GTCCTGGAGG CTGCACGACA                                     20
378 (2) INFORMATION FOR SEQ ID NO: 19:
380      (i) SEQUENCE CHARACTERISTICS:

```

## VERIFICATION SUMMARY

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:54

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

L:35 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:36 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:62 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1  
L:80 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2  
L:98 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3  
L:117 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4  
L:134 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5  
L:152 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6  
L:170 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7  
L:188 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8  
L:206 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9  
L:224 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10  
L:242 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11  
L:260 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12  
L:278 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13  
L:296 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14  
L:314 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15  
L:332 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16  
L:350 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17  
L:368 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18  
L:386 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19  
L:404 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20  
L:422 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=21  
L:440 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=22  
L:458 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=23  
L:476 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24  
L:494 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=25  
L:512 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=26  
L:530 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=27  
L:548 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28  
L:566 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=29  
L:584 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30  
L:602 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31  
L:620 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32  
L:638 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=33  
L:656 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34  
L:674 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=35  
L:692 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=36  
L:710 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37  
L:728 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=38  
L:746 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=39  
L:764 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=40  
L:782 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=41  
L:800 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=42  
L:818 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=43  
L:836 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=44  
L:854 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=45  
L:872 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=46

VERIFICATION SUMMARY

DATE: 09/15/2003

PATENT APPLICATION: US/08/887,505A

TIME: 10:39:54

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09152003\H887505A.raw

L:890 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=47  
L:908 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=48  
L:926 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=49  
L:944 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=50